



Benefit Ratio Statement

Pioneer Bay SCS

February 2018

Pioneer Bay - Road and Drainage Construction

Introduction

The Bass Coast Shire has a legacy of urban areas with no drainage, unsealed roads and no paths. The estimated cost of bringing these estates and urban roads to a basic level of infrastructure is estimated to be over \$150 million.

This report addresses the calculation of the total amount that may be levied on the property owners that receive a benefit from the proposed works through a special rate or special charge.

The calculation of the total levy requires the following:

- Calculation of the total cost of the works or services
- Calculation of the 'benefit ratio' which depends on reasonable estimates of:
 - i. 'total special benefits' to properties included in the scheme
 - ii. 'total special benefits' to properties not included in the scheme (if any) and
 - iii. 'total community benefits'

A. Define Purpose

The purpose of the proposed special charge scheme on properties in the Pioneer Bay estate is to defray the costs associated with the upgrade of roads, road drainage, footpaths, nature strip works and ancillary works.

The Local Road Priority List is based on Council's Urban Road and Drainage Improvement Policy which incorporates a scoring system for projects identified by Council as works necessary for upgrading the streets within the Shire. This list then develops a priority for works within special rate or charge schemes.

The scoring system from which the list is developed is based on each project's individual housing development density, road and road side drainage, maintenance levels, the presence of existing drainage and sewerage, customer complaints and the effects on Council's Corporate Plan.

The Pioneer Bay estate is now the highest priority within the Road and Drainage Improvement Program.

Pioneer Bay has had a history of drainage and flooding issues, both broad and localised, over many years. These include but are not limited to the following:

- Flooding and inundation from the stream/waterway adjacent to the northern boundary of the estate;
- Erosion of properties adjacent to the northern boundary of the estate backing onto the stream/waterway from high flows;
- Limited or no urban drainage in some areas of the estate;

- Under-sized urban drainage in some areas of the estate;
- Significant sheet flows from the rural land to the south of the estate; and
- Land subject to inundation from high tides and storm surge events.

Council officers are separately working in partnership with Melbourne Water to investigate opportunities to improve flood protection, waterway health and stormwater quality issues in the area. The option of diverting flows from the northern stream/waterway through Pioneer Bay estate to a wetland on the South of Pioneer Bay was the preferred opportunity, as it provides multiple social and environmental benefits.

The Melbourne Water works will be conducted as a separate (but otherwise related) project to this Special Charge Scheme project.

At its Ordinary Meeting at 20 September 2017 Council resolved to:

1. Commence the statutory process under section 163 of the Local Government Act 1989 (Act) to declare a Special Charge for the purpose of defraying the expenses and costs to be incurred by Council in relation to the construction and drainage of the roads in of the Pioneer Bay Estate.
2. Give public notice of the proposed declaration by way of an advertisement in the 'South Gippsland Sentinel Times' and 'Phillip Island and San Remo Advertiser' of the intention of Council to declare a Special Charge
3. Send separate letters enclosing a copy of the public notice to the owners and occupiers of the properties liable to pay the special charge and ask for submissions and/or objections in writing in relation to the Proposed Declaration of Special Charge in accordance with sections 163A, 163B and 223 of the Act.
4. Establish a Committee under section 223(1)(b)(i) of the Act to hear any persons who have requested that they be heard in support of their submissions and consider all other submissions.

B. Ensure Coherence

The proposed road and drainage improvement works located within the Pioneer Bay estate will provide a special benefit to property owners located within the scheme boundary and are otherwise physically connected to the purpose set out in A.

C. Calculate Total Costs

The implementation of a Special Rate or Charge is regulated by *Section 163 of the Local Government Act 1989*. The Ministerial Guidelines require Councils to be more transparent about how they calculate the Maximum Total Levy amount.

For this project the Maximum Total Levy amount has been calculated in accordance with these guidelines. The total levy amount and other relevant data is summarised in the table below.

Total Project Cost	\$4,580,691.99
LESS Connectivity Provision under the Urban Road and Drainage Improvement (URDI) Policy	\$120,667.79
LESS the cost of the removal of the existing seal along Kallay Drive	\$11,900.00
LESS the cost of the removal of the existing kerb and channel	\$9,520.00
Total Scheme Costs	\$4,438,604.21
Benefit Ratio	0.9215
Maximum Levy Amount	\$4,090,173.77
Council Contribution (%)	7.85%
Council Contribution (\$)	\$348,430.43

D. Identify Special Beneficiaries

It is expected that all properties with a frontage to a road included within the scheme and listed within the apportionment spreadsheet will receive a road-related special benefit from the proposed works.

It is also expected that all properties included within the scheme will receive a benefit from the proposed drainage works over and above any road-related drainage benefit which presently exists. All properties in the scheme will now have a legal right to connect their surface and stormwater and drainage systems to a physical public drainage system within the public road network otherwise servicing their properties (and notwithstanding that some of the properties in the scheme may already have their surface and stormwater drainage systems connected to (or have a separate right to connect their stormwater and surface drainage systems to) other Council drains which are located at the rear of the properties (whether or not that separate right has been paid for under any previous special charge scheme).

All 227 privately-owned rateable properties in the scheme are considered to receive a relevant special benefit from the works to be provided under the scheme. The relevant special benefit is

the construction of roads and the provision of an underground external stormwater drainage system in the roads being constructed.

Separately, it is acknowledged that the 88 properties which were the subject of the previous easement special charge drainage scheme undertaken by the Shire of Bass in the 1990's have separately paid for the right to legally connect their properties to a rear public easement drain, whether or not they have chosen to exercise that right (so that they will effectively enjoy and will have paid for two legal (and physical) points of discharge).

The properties included in the previous drainage scheme are highlighted in yellow in Figure 1 below. The properties are still considered to receive a 'full' drainage special benefit for the purposes of the calculation of the Benefit Ratio, notwithstanding that in the interests of fairness and equity they will be given a 'discounted' drainage benefit at the apportionment stage.

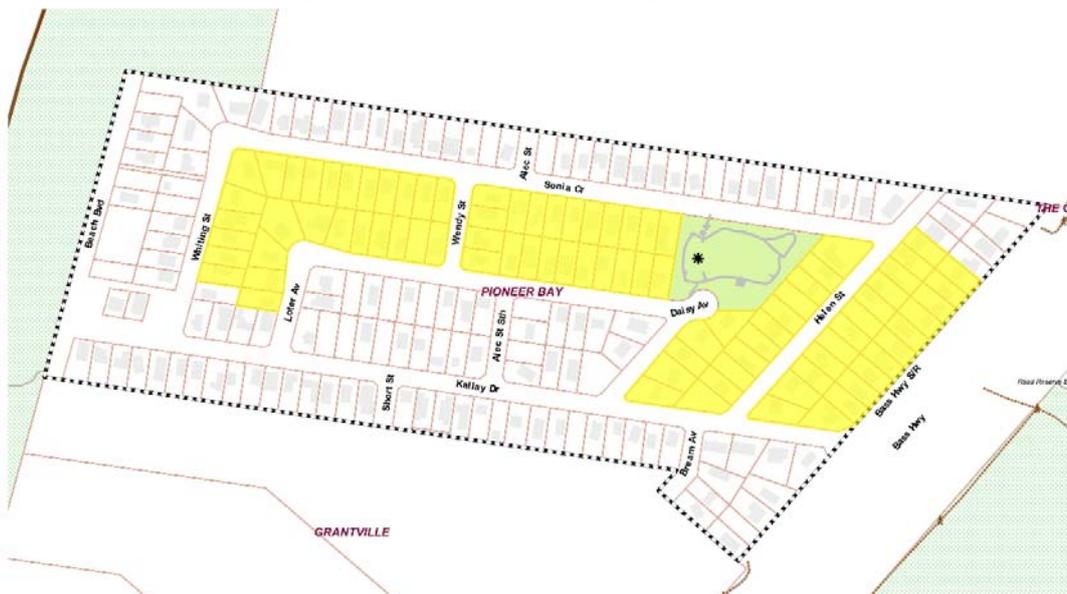


Figure 1 – Scheme Boundary and Properties Included in the Previous Scheme are highlighted in Yellow.

E. Determine Properties to Include

For the purposes of calculating the Benefit Ratio, a notional benefit value, called a Benefit Unit (BU), will be used. This is equal to average benefit for all the properties included in the Scheme. It is expected that all properties included within the Scheme will receive 'half' benefit unit from the road works and a 'half' benefit unit from the drainage works (total 1 BU for each property).

Two (2) of the 227 properties have subdivision potential, being 71 Sonia Crescent and 3-7 Beach Boulevard, as set out below. One of these properties can be subdivided into 3 standard lots (making an extra 2 lots for the scheme) and the other property can be subdivided into 2 standard

lots (making one extra property for the scheme) (total of an additional 3 lots). This therefore produces 3 further 'notional' lots, also being 'special benefit in' properties.

These two properties have been assessed on their subdivision potential. The subdivision potential is assessed on the area of the property and how many average sized properties (average size being 534m²) that property can be subdivided into:

- 71 Sonia Crescent has an area 1433.81m² and the potential to be subdivided into two properties; therefore this property will receive one (1) benefit units for road works and one (1) benefit units for drainage works. See figure 2 below.

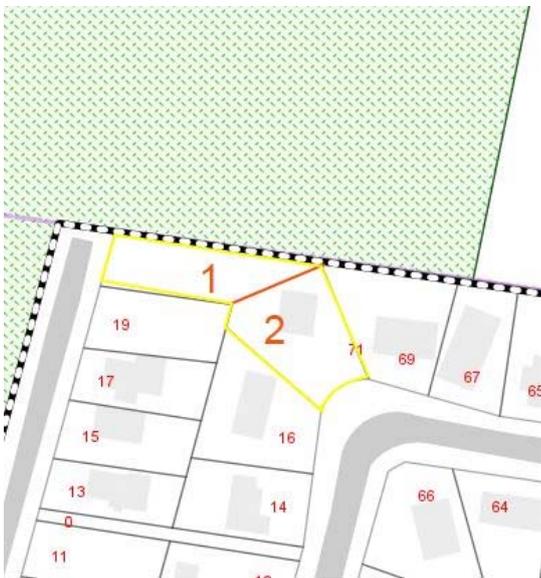


Figure 2 – 71 Sonia Crescent with the potential to subdivide into two properties.

- 3-7 Beach Boulevard has an area of 1613.03m² and has the potential to be subdivided into three (3) properties; therefore this property will receive one and a half (1.5) benefit units for road works and one and a half (1.5) benefit units for drainage works. See Figure 3 below:

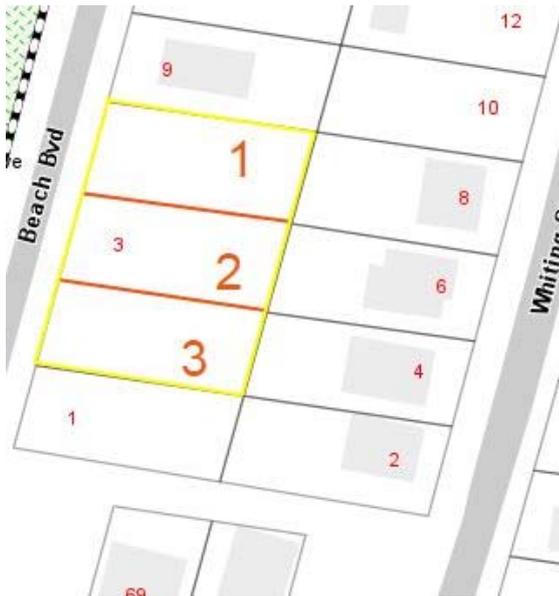


Figure 3 – 3-7 Beach Boulevard has the potential to subdivide into three properties.

The Pioneer Bay Reserve Community Park has been excluded from the special benefit as a Total Special Benefit (TSB_(out)). The Community Park has an area of approximately 6407m² which is equivalent to twelve average sized blocks (average block size of 535m²) and hence will receive six (6) benefit units for road works and six (6) benefit units for drainage works. A map showing how the Community Park can be broken into 12 units is shown in Figure 4 below:

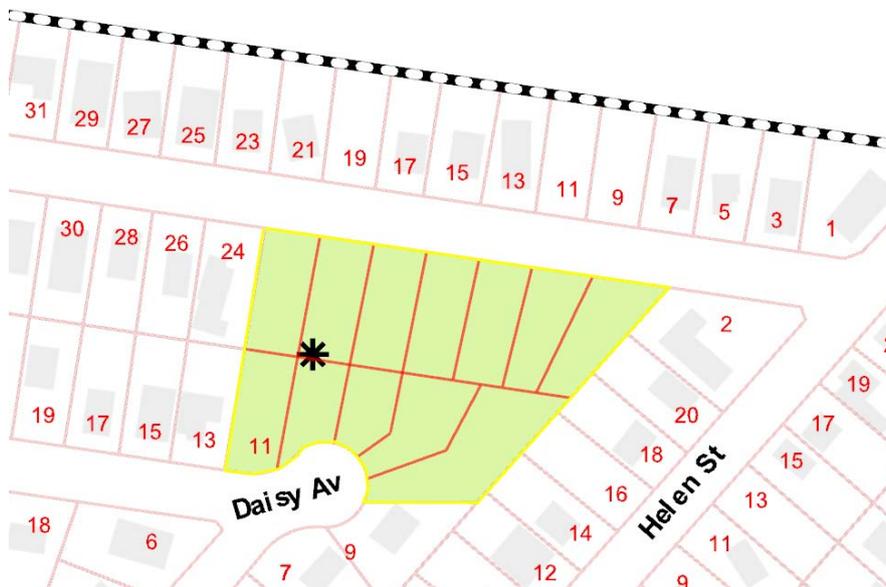


Figure 4 – Showing Subdivision Potential of the Pioneer Bay Reserve Community Park - Daisy Avenue

F. Estimate Total Special Benefits

Total Special Benefit Units have been defined as follows:

$$TSB = TSB_{(in)} + TSB_{(out)}$$

Total Special Benefits = Total Special Benefits In + Total Special Benefits Out

TSB_(in) has been calculated as follows:

Total Special Benefit Units In (TSB in)	Drainage Works	Road Works
Residential Properties	115	115
Total TSB in	230	

TSB_(out) has been calculated as follows:

Total Special Benefit Units In (TSB out)	Drainage Works	Road Works
Pioneer Bay Reserve (Daisy Avenue)	6	6
Total TSB out	12	

G. Estimate Total Community Benefit

In addition to establishing the special benefits for the scheme, an assessment of the community benefit is also required to be undertaken to calculate the Maximum Total Levy amount.

In terms of assessing the level of community benefit, it was generally considered that the works included in the Scheme primarily directly benefit only those properties included within the Scheme boundary and accordingly that the level of benefit to the broader community will be very limited.

The community benefit attributable to the proposed Scheme works is from the greater or external community receiving what is considered to be some marginal (perhaps even remote) benefit arising from: the use of the bus stop on the Bass Highway; the use of the roads within the Pioneer Bay Estate to access the wetland reserve and the foreshore access points; and an improvement in surface and stormwater quality discharging to the existing ocean outfall drain (arising from the sealing of roads within the scheme area).

Accordingly (but in a very limited way), it is considered that people in the broader community will receive some benefit from the works being provided under the Scheme and that on this basis Council should pay for that benefit.

This is because:

- There will be some improvement in public beach access;
- There will be a provision of wetlands and an ability of the public to have access to (and to enjoy) the environmental benefits of those wetlands;

- There will be an improvement in access to the public bus stop servicing the Bass Highway bus route; and
- There will be some improvement in water quality being discharged at the ocean outfall drain.

Based on traffic studies carried out by Council in 2017, Council is of the view that some persons (other than those persons living in or servicing the Pioneer Bay estate) will continue to use the estate’s roads following the proposed road and drainage upgrade.

To calculate the level of ‘community benefit’ attributable to persons who are not accessing or servicing properties within the Scheme boundary, an assessment of vehicle movements was undertaken using the data from the traffic count (where there was an average of 776 vehicle movements per day). Of these 776 movements per day, it was considered that each property had an average of 4 vehicle movements per day.

There are three car parking spaces allowed for at the entrance to the wetlands and three existing car parking spaces at the foreshore to which Council has taken a conservative approach in estimating there is 15 vehicle movements per day. The total estimated ‘community benefits’ arising from this traffic data and the surface and stormwater quality benefit arising from the sealing of the roads are shown in the table below:

Total Community Benefits (TCB)	
Foreshore (on the western side)	2.3
Wetland Reserve (on southern side)	2.3
Infrastructure leading to the bus stop on Bass Highway	1
Sealing of the roads resulting in better water quality	2
Total TCB	7.6

The above foreshore and future wetland reserve community benefits are explained as follows:

Public foreshore and wetlands access

2017 traffic count at Pioneer Bay entrance = 776 vehicles per day
 776/230 properties = 3.37 vehicles per day per property then round up = 4 average vehicle movements per day per property.
 Vehicle movements per day to Beach = 3 car parks provided x average 4 vehicles per day = 12 v/p day, then increase to **15 for extra allowance**
 Vehicle movements per day to Future Wetland = 3 car parks x average 4 vehicles per day = 12 v/p day, then increase to **15 for extra allowance**
 Vehicle movements to properties is 776 total minus 30 for Wetland and Beach = 746
 Special benefits, road related = 115 BU
 Therefore total Community Benefit for external traffic is $115/746 \times 30 = 4.6$

This is made up of:

Wetlands is $115/746 \times 15 = 2.3$

Beach is $115/746 \times 15 = 2.3$

Infrastructure leading to the bus stop on Bass Highway

Whilst considered to be (at best) a marginal community benefit, it is recommended that a 'small allowance' of 1 BU be allowed.

Sealing of the roads resulting in better water quality

It is recommended that 2 BU's be allowed for this benefit which again is considered to be (at best) a marginal benefit. The cost of the scheme works (referrable to the sealing of the roads) results in an allowance of 2 BU's which. This is 10% of the road sealing costs and is considered to be reasonable.

Therefore, total TCB = 7.6 BU's.

H. Calculating the 'Benefit Ratio'

The benefit ratio is calculated as:

$$R = \frac{\text{TSB}_{(in)}}{\text{TSB}_{(in)} + \text{TSB}_{(out)} + \text{TCB}}$$
$$= 230 / (230 + 12 + 7.6)$$

Total Benefit Ratio = 0.9215

I. Calculating the Maximum Total Levy

The Act and the prescribed ministerial guidelines set out the basis for administering the scheme and determining the distribution of costs.

Council has to determine the maximum amount that landowners included within the scheme must contribute towards the works, also known as the maximum total levy. The legislation and guidelines require Council to determine the following:

- Identify any properties within the scheme boundary that will not be included in the scheme but will receive a benefit. This requirement primarily relates to non-rateable properties such as Crown Land. The guidelines indicate that Council should contribute financially for these properties.
- The level of community benefit that Council is required to contribute to the scheme based on the level of benefit to the greater community.

Benefit Ratio Statement



Council must determine the maximum total amount that may be levied on landowners in accordance with the Act. The following formula is used to determine the maximum levy amount:

$$S = R \times C$$

Where **R** is the benefit ratio determined by Council, **C** is the total scheme cost and **S** is the maximum amount levied to landowners.

Maximum Levy Amount (R x C = S)
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$0.9215 \times \$4,438,604.21 = \$4,090,173.77$
